

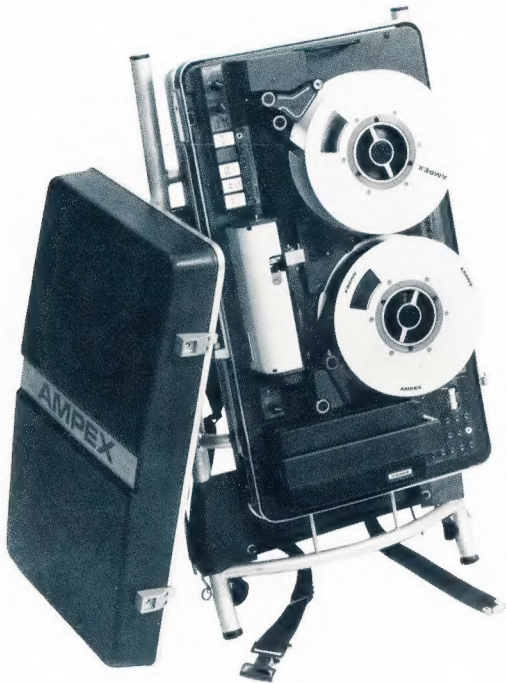
VR-3000 PORTABLE VIDEO RECORDER BC-300 HAND HELD CAMERA

AMPEX

**Compact high-band/low-band video recorder
Lightweight hand-held monochrome camera**

Ampex VR-3000

Portable Video Recorder



Features

- Records NTSC, PAL or SECAM color and monochrome to SMPTE and EBU quadruplex standards.
- Compact back-pack unit weighs just 55 pounds.
- Tapes are available for immediate playback on standard quadruplex machines.
- Quick-look playback electronics provide for preview of recorded material (monochrome).
- Self-contained audio system accepts any standard high impedance microphone or line level input.
- Operates on batteries or house power. Battery-eliminator provides for a.c. operation where desired.
- Automatic cue-up system conserves tape by recording scenes with a maximum of one frame between individual cuts.
- Available with integrated monochrome camera to provide complete one-man system.

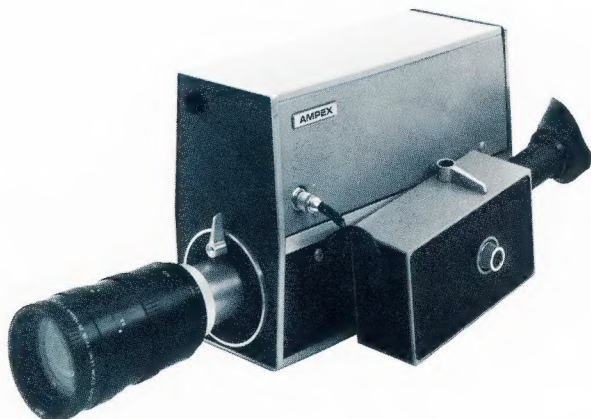
Broadcast tapes can be made on location where conventional equipment cannot be taken. Offers stations, networks, and teleproduction specialists most of the freedom and flexibility of film.

The VR-3000 can be used with the Ampex BC-300 monochrome camera in a self-contained, battery-operated system entirely carried by one man. Or it can be used as a high-band color recorder teamed with one or more color cameras.

Using the Ampex Mark XI Video Head assembly, the VR-3000 is built to the most demanding specifications ever placed on miniaturized television equipment. Instantly switchable between standards, the VR-3000 produces tapes compatible with all major world-wide television systems.

Ampex BC-300

Hand Held Camera



Features

- Compact, maneuverable camera weighs 15 pounds with electronic viewfinder. Can be carried on VR-3000 back-pack frame.
- High sensitivity — produces excellent monochrome pictures with light levels as low as 30 footcandles.
- Features a 6:1 zoom lens, built-in 3-step neutral density filter wheel, and elapsed time indicator.
- Detachable, tilting viewfinder is electronic.
- Includes tally light indicating proper VR-3000 servo operation.
- Built-in EIA Sync Generator.

Ideal when used with VR-3000 for monochrome operation. Provides one-man picture and sound capability for action shots where no power lines exist, or can be used with a.c. power when operated on extension cables using a battery eliminator in the VR-3000. In this configuration camera can be operated distant from the recorder. Excellent pictures are provided by use of Plumbicon* tubes and modern integrated circuits.

VR-3000 RECORDER SPECIFICATIONS

Size:

24" long, 14" wide, 8" high

Weight:

55 pounds (complete including back-pack rack)

Power:

Supplied by silver cadmium battery (operating time per charge is 40 minutes of preview, plus 20 minutes of recording)

Reels:

Standard 8" precision videotape reel or special lightweight 8" magnesium reel

Tape Speed and Format:

15 ips (on 60 field scanning systems), transverse scan: fully compatible with SMPTE recommended practice and U.S.A. standards

Recording Time:

20 minutes minimum (with 1.5-mil tape); 35 minutes (with 1.0-mil tape)

Signal System:

High-band/low-band monochrome (switchable) or high-band NTSC/PAL/SECAM color, 525 line (625 and other line standards by circuit board change)

Fast Forward:

20-minute reel in 5 minutes

Rewind:

5 minutes for a full 20-minute reel

Playback:

Monitoring purposes only

Audio System:

Control: automatic gain control circuit with fast attack, triple time constant recovery, 60 dB control range
Response: ± 3 dB, 50 Hz to 10 kHz
Signal-to-Noise: 40 dB
Input Impedance: 150/250 ohms
balanced microphone, or switchable to a balanced bridging line input with or without AGC
Preset Controls: high-band/low-band switch

Performance of VR-3000 Tapes When Played Back on VR-2000

525/60 HB:

Bandwidth:

Flat to 4.1 MHz; -3 dB at 4.5 MHz; tolerance ± 0.5 dB

Signal-to-Noise:

45 dB

Differential Gain:

Less than 4% blanking to white

Differential Phase:

Less than 4° at 3.58 MHz off tape

625/50 HB:

Bandwidth:

Flat to 5.5 MHz; -3 dB at 6.0 MHz; tolerance ± 0.5 dB

Signal-to-Noise:

43 dB

Differential Gain:

4%

Differential Phase:

Less than 4° at 4.43 MHz off tape

VR-3000 Supplied With:

Transport (including Mark XI video head) in carrying case; battery power pack; battery charger; AC power pack (battery eliminator); empty 8" reel; alignment tape (525 or 625); accessory case for storing two battery power packs, battery charger and two tape reels.

Accessories and Spares Available:

Battery charger; accessory field case; backpack rack; adapter tray for mounting a power pack in accessory field case; spare battery power pack, spare Mark XI video head

BC-300 CAMERA SPECIFICATIONS

Size:

12" long, $4\frac{1}{2}$ " wide, $8\frac{1}{2}$ " high

Weight:

15 pounds (with viewfinder)

Power:

Powered from recorder power pack

Pickup Tube:

Plumbicon* tube

Video Output:

1 V (composite)

Video Impedance:

75 ohms

Sensitivity:

Minimum light for usable picture is 30 foot-candles

Resolution:

100% response at 4.2 MHz at center; 70% response at 4.2 MHz in corners

Signal-to-Noise:

Greater than 38 dB with 25 ft.-candles incident at f2.8 (without aperture correction, 60% scene reflectance)

Scanning:

EIA 525 lines, 60 fields per second (or 625 lines, 50 fields per second by changing one board)

Warm-up Time:

Operates after 30 seconds from standby mode to "on" mode

Aperture Correction:

Adjustable to 12 dB at 5.5 MHz

Time Indicator:

Indicator on camera shows recording elapsed time in minutes and seconds

Tally Lights:

Front and rear of camera; record mode and servo lock-up viewed in viewfinder via plastic "light pipe"

Lens:

Quick-release mount for 6:1 zoom lens

Filters:

Built-in neutral density filter wheel behind lens (3 optical filters)

Camera Controls:

Video gain, black level, gamma correction ON/OFF, preheat, system ON/OFF
VTR Controls on Camera:
Stop, rewind, play, record

Viewfinder Display:

0.8" diagonal picture with apparent size of 4 x 3 through magnifier; 20 ft. lamberts brightness

Viewfinder Controls:

Contrast and brightness

BC-300 Supplied With:

Detachable viewfinder, including display tube and magnifier; Plumbicon* tube; zoom lens; 5' camera cable; camera field case to hold camera, lens and viewfinder; camera mounting bracket; quick release camera adapter

Accessories and Spares Available:

Power pack accessories (same as for VTR); optional accessory case; 20' and 100' camera cables; camera tripod; portable lighting package (two types available, battery and AC); cable adapter unit (attaches to camera to provide direct video feed); camera tripod adapter; adapter tray for mounting power pack in field case; battery belt; camera shoulder holder.

*TM N.V. Philips Co.

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AMPEX

Ampex Corporation, Audio-Video Systems Division
401 Broadway
Redwood City, California 94063